



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/631,873	08/02/2000	Rajesh R Shah	5038-55INTEL#3P222	8933
7590	11/03/2004			
Sharmini N. Green c/o BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP 12400 Wilshire Boulevard Seventh Floor Los Angeles, CA 90025			EXAMINER SIDDIQI, MOHAMMAD A	
			ART UNIT	PAPER NUMBER
			2154	
DATE MAILED: 11/03/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

CS

Office Action Summary	Application No. 09/631,873	Applicant(s) SHAH, RAJESH R	
	Examiner Mohammad A Siddiqi	Art Unit 2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-12 and 14-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-12 and 14-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-2,4-12, and 14-27 are presented for the examination.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 05/18/2004 has been entered.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of

Art Unit: 2154

paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

4. Claims 1-2,4-12, and 14-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Arai et al. (6,496,893) (hereinafter Arai).

5. As per claims 1, and 11, Arai discloses a method and an article for a parent device to access a service of a child device (col 6, lines 1-12) in a driver stack (col 4, lines 4-12), the method comprising:

Creating (col 3, lines 30-31) a virtual device (col 3, lines 25-35),
binding (col 7, lines 15-16) the virtual device to the parent device (col 6, lines 1-12), and

inserting (col 11, lines 40-41) the virtual device in the driver stack (col 9, lines 24-31) below the child device (col 6, lines 1-12),

accessing the services of the child device by the parent device with a request (col 6, lines 1-12) from the virtual device (col 9, lines 1-30) on behalf of the parent device (arbitrators and enumeration, 72, 78, fig 4, col 4, lines 21-27 and lines 33-35).

6. As per claim 21, Arai discloses an apparatus supporting removal of a driver stack (col 15, lines 12-20), the apparatus comprising:

a computer (col 3, lines 1-5) including a hardware component requiring the driver stack (col 9, lines 16-31);

An operating system running the computer (col 1, lines 25-27);

The driver stack loaded (col 9, lines 16-31) on to the operating system and supporting the hardware component (col 5, 5-20), the driver stack including at least a parent driver and a child driver (col 4, lines 1-2), the child driver providing a service accessed by the parent driver (col 4, lines 1-20),

A virtual driver (col 3, lines 10-15) bound to the parent driver and installed below the child driver in the driver stack (col 3, lines 56-67); and

A request from the virtual device on behalf (arbitrators and enumeration, 72, 78, fig 4, col 4, lines 21-27 and lines 33-35) of the parent driver to access the service provided by the child driver (col 6, lines 1-12).

7. As per claims 2 and 12, Arai discloses the driver stack is a dynamic driver stack (col 9, lines 17-31).

8. As per claims 4,14, 25, and 26, Arai discloses accessing the service of the child device includes incrementing a reference count of a number of users of the service of the child device (col 13, lines 27-57).

9. As per claims 5, and 15, Arai discloses binding the virtual device includes arranging (col 15, lines 25-44) the parent device to receive a query to remove the dynamic driver stack sent to the virtual device (col 15, lines 14-25).

10. As per claims 6, 16, 22, and 23, Arai disclose, receiving at the virtual device a query to remove the dynamic driver stack (col 3, lines 11-15), releasing the service of the child device, and passing the query to remove the dynamic driver stack to a next device in the dynamic driver stack (74,72, fig 4, col 6, lines 9-11).

11. As per claims 7 and 17, Arai discloses releasing the service of the child device includes releasing the service of the child device by the parent device (col 11, lines 61-67 and col 12, lines 1-5).

12. As per claims 8 and 18, Arai disclose releasing the service of the child device includes invoking a code within the virtual device that accesses the parent device (col 12, lines 5-40).

13. As per claims 9, 19 and 27, Arai disclose releasing the service of the child device includes decrementing a reference count of a number of users of the service of the child device (col 13, lines 36-43).

14. As per claims 10 and 20, Arai disclose accessing the service of the child device includes accessing a second service of a second child device above the virtual in the dynamic driver stack (col 1, lines 48-67 and col 2, lines 5-21).

15. As per claim 24, Arai discloses the parent driver is adapted to insert (col 11, lines 40-41) the virtual driver (col 3, lines 10-15) into the stack before accessing the service provided by the child (col 3, lines 56-67).

Response to Arguments

16. Applicant's arguments filed 05/18/2004 have been fully considered but they are not persuasive, therefore rejections to claims 1-2,4-12, and 14-27 is maintained.

17. In response to applicant argument "None of these sections, however discloses accessing the service of the child device", the examiner respectfully disagrees. Arai teaches a request from the virtual device on behalf

Art Unit: 2154

(arbitrators and enumeration, 72, 78, fig 4, col 4, lines 21-27 and lines 33-35) of the parent driver to access the service provided by the child driver (arbitrators are implemented as virtual drivers to resolve the conflicts, enumerator is a plug and play device driver that detects devices below its own device node on the hardware tree and creates unique device Ids, col 6, lines 1-12 and col 3, lines 25-36).

18. Applicant's arguments do not comply with 37 CFR 1.111(c) because they do not clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. Further, they do not show how the amendments avoid such references or objections.

19. Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

Conclusion

20. This is a Request for Continued Examination of applicant's earlier Application No. 09/631.873. All claims are drawn to the same invention claimed in the earlier application and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the earlier application. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action in this case. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no, however, event will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

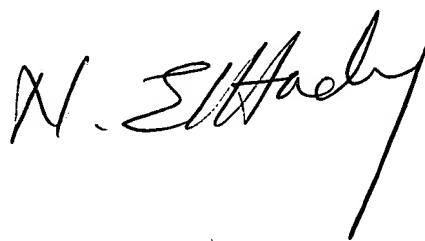
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammad A Siddiqi whose

telephone number is (703) 305-0353. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A Follansbee can be reached on (703)305-8498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MAS

A handwritten signature in black ink, appearing to read "N. S. Hadley", with a long, sweeping vertical stroke extending downwards from the end of the name.